

Public Utilities

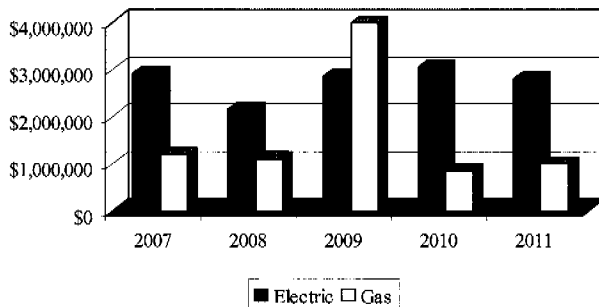
The Public Utilities Capital Projects (electric and gas systems) are one of the largest expenditure categories, representing almost one-quarter of the proposed Capital Improvements Program. Projects include improvements and expansion of the electric and gas systems through transmission, distribution and service projects.

Fiscal Year	Recommended Expenditures - Electric Fund	Recommended Expenditures - Gas Fund
2007	\$2,920,000	\$1,195,000
2008	\$2,155,000	\$1,100,000
2009	\$2,850,000	\$3,990,000
2010	\$3,055,000	\$850,000
2011	\$2,800,000	\$990,000

Revenues

Funding for these recommended capital projects will principally come from electric and gas utility sales revenues. For the large and costly projects (substation construction, dispatch center, automated meter reading project and gas peaking shaving facility), debt financing will be used with the associated debt service payments to be funded through the current revenues of the electric and gas systems. The Gas and Electric Utility funds will be able to support their expenditures during the five year CIP period.

Public Utilities Capital Projects Funding



Public Utilities

Capital Improvement Program Highlights:

- Continued to fund new mains and services for the extension of gas service.
- Continued funding for the relocation of Electric Utility lines to accommodate North Carolina Department of Transportation improvement projects.
- Funding provided for replacement of electric and gas heavy motorized equipment and vehicles.
- Continued funding for replacement of wooden electric transmission line poles.
- Continued funding for automated meter reading equipment for Electric and Gas Utilities.
- Funding provided for upgrade of electric substations 1, 2, and 5.
- Funding provided for Gas peak shaving facility.
- Continued funding for Utility GIS & Dispatching System and Central Dispatch Center.

Previously Funded Projects:

Project	Status
Upgrade Electric Point-of-Delivery Station	Complete
Automated Meter Reading	In-Progress
New Services for Gas Utility	In-Progress
Cast Iron Pipe Replacement	In-Progress
Electric System Distribution Improvements	In Progress
Upgrade Electric Substation 11	Complete
Street Light Improvements	In-Progress
Load Management Program	In-Progress

Public Utilities - Electric

FUNDING SOURCES	PRIOR YEAR COST	2006-07 BUDGET	2007-08 PLAN	2008-09 PLAN	2009-10 PLAN	2010-11 PLAN	2007-11 PLAN TOTAL
Grants	\$250,000	\$50,000	\$50,000	\$50,000	\$50,000	\$0	\$200,000
Capital Reserves	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Debt Proceeds	\$1,917,400	\$1,585,000	\$700,000	\$1,800,000	\$1,810,000	\$1,100,000	\$6,995,000
General Fund Contribution	\$117,000	\$112,000	\$112,000	\$112,000	\$112,000	\$112,000	\$560,000
Electric Fund Contribution	\$1,434,254	\$1,173,000	\$1,293,000	\$888,000	\$1,083,000	\$1,588,000	\$6,025,000
TOTAL FUNDING	\$3,718,654	\$2,920,000	\$2,155,000	\$2,850,000	\$3,055,000	\$2,800,000	\$13,780,000
PROJECT DESCRIPTIONS:							
Equipment Replacement - Electric	\$235,000	\$285,000	\$145,000	\$200,000	\$555,000	\$550,000	\$1,735,000
Radio System Improvements	\$318,254	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$750,000
Relocation of Utility Lines - DOT	\$0	\$50,000	\$50,000	\$50,000	\$50,000	\$0	\$200,000
Load Management Generation Program	\$350,000	\$0	\$0	\$0	\$0	\$0	\$0
Distribution System Improvements - Electric	\$490,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$1,250,000
Load Management Program	\$50,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000
Street Light Improvement	\$0	\$75,000	\$100,000	\$100,000	\$100,000	\$100,000	\$475,000
Utility GIS & Dispatching System	\$200,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000
Upgrade Point of Delivery Station	\$1,177,400	\$0	\$0	\$0	\$0	\$0	\$0
Upgrade Substation #1	\$0	\$0	\$0	\$0	\$0	\$1,100,000	\$1,100,000
Upgrade Substation # 2	\$0	\$1,300,000	\$0	\$0	\$0	\$0	\$1,300,000
Upgrade Substation # 5	\$0	\$0	\$0	\$0	\$1,500,000	\$0	\$1,500,000
Upgrade Substation # 11	\$400,000	\$0	\$0	\$0	\$0	\$0	\$0
New Transmission Lines	\$0	\$0	\$0	\$0	\$0	\$200,000	\$200,000
Transmission Line Clearance	\$0	\$0	\$110,000	\$0	\$0	\$0	\$110,000
Central Dispatch Center	\$0	\$0	\$700,000	\$0	\$0	\$0	\$700,000
Transmission Pole Replacement	\$50,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$1,250,000
Sectionalizing Plan - Electric	\$0	\$100,000	\$0	\$0	\$0	\$0	\$100,000
Long Range Plan - Electric	\$0	\$0	\$0	\$50,000	\$0	\$0	\$50,000
Automated Meter Reading -Electric	\$348,000	\$200,000	\$200,000	\$1,600,000	\$0	\$0	\$2,000,000
Equipment Shed - Electric	\$100,000	\$0	\$0	\$0	\$0	\$0	\$0
Transformer Shop Addition	\$0	\$60,000	\$0	\$0	\$0	\$0	\$60,000
TOTAL PROJECTS	\$3,718,654	\$2,920,000	\$2,155,000	\$2,850,000	\$3,055,000	\$2,800,000	\$13,780,000

Public Utilities - Electric

Division: Electric

5

Number:

6000.95

Title: Equipment Replacement - Electric

Project Justification:

To provide funds for new and replacement construction equipment necessary for the construction, operation and maintenance of the city's Electric Distribution System. Proper and reliable equipment is essential for ensuring a safe, reliable, and cost effective operation. Equipment that is not replaced at the end of its usable life increases repair and operating costs, and outage duration, while decreasing safety, reliability, and customer satisfaction.

This budget provides for replacing equipment on the following cycle:

Bucket & Derrick Trucks - 8 years

Directional Bore, Large - 10 years

Dump Trucks (3) - 8 years

Backhoe (3) - 5 years

Trencher, Large (3); Medium (2) - 4 years

EQUIPMENT	N/R	PRIOR YEAR COST	2006-07 BUDGET	2007-08 PLAN	2008-09 PLAN	2009-10 PLAN	2010-11 PLAN	2007-11 PLAN TOTAL
Backhoe	R			\$95,000			\$100,000	\$195,000
Boom Truck, 100'	N							\$0
Bucket Truck, 40' (Service)	R					\$145,000		\$145,000
Bucket Truck, 65' (Mtl. Hndlr.)	R						\$170,000	\$170,000
Bucket Truck, 65'	R	\$160,000				\$180,000		\$180,000
Derrick Truck, Large	R				\$200,000			\$200,000
Derrick Truck, Regular	R		\$185,000			\$165,000		\$350,000
Directional Bore, Large	R						\$200,000	\$200,000
Dump Truck	R					\$65,000		\$65,000
Trencher, Medium	R						\$80,000	\$80,000
Trencher, Large	R		\$100,000					\$100,000
Excavation Tamper	N			\$50,000				\$50,000
Wire Pulling Trailer	N	\$75,000						\$0
TOTAL		\$235,000	\$285,000	\$145,000	\$200,000	\$555,000	\$550,000	\$1,735,000
FUNDING SOURCE								
Current Revenue								\$0
Enterprise Revenue		\$235,000		\$145,000		\$245,000	\$550,000	\$940,000
Debt			\$285,000		\$200,000	\$310,000		\$795,000
Capital Reserves								\$0
Grants/Other								\$0
TOTAL		\$235,000	\$285,000	\$145,000	\$200,000	\$555,000	\$550,000	\$1,735,000

N/R= New or Replacement

Justification:

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective H-3 in that it updates the CIP to provide quality utility service.

Public Utilities - Electric

Division: Electric Category: 5

Number:

Title: Radio System Improvements

Project Description:

This project provides for the systematic replacement of analog radios and radio equipment with digital capable equipment. Dependable and reliable communications are essential for all city departments to operate effectively.

PROJECT	PRIOR YEAR COST	2006-07 BUDGET	2007-08 PLAN	2008-09 PLAN	2009-10 PLAN	2010-11 PLAN	2007-11 PLAN TOTAL
Planning							\$0
Construction							\$0
Equipment/Furnishing	\$318,254	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$750,000
TOTAL	\$318,254	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$750,000
FUNDING SOURCE							
Current Revenue	\$117,000	\$112,000	\$112,000	\$112,000	\$112,000	\$112,000	\$560,000
Enterprise Revenue	\$201,254	\$38,000	\$38,000	\$38,000	\$38,000	\$38,000	\$190,000
Debt							\$0
Capital Reserves							\$0
Grants/Other							\$0
TOTAL	\$318,254	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$750,000

Estimated Annual Opera Start up \$ - Recurring \$ -

Justification:

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective A in that it provides to upgrade and maintain existing municipal facilities and services which is consistent with the Comprehensive Plan.

Project Status:

05-06 - the following projects were completed:

- The existing microwave link between the radio tower and the Public Safety Dispatch Office at the Police Department was replaced with a combination fiber optic / dual antennae microwave link providing quadruple redundancy.
- The existing analog controller and six analog repeaters were replaced with a new digital capable controller and six digital capable repeaters.

06-07 - the following project is planned:

- The analog controller and six analog repeaters removed from service will be located at a private radio tower providing a true backup radio system. Cost includes installation of equipment at backup tower site and purchase of transmit & receive antennas and cables.

- 48 replacement portable digital capable radios will also be purchased.

Future years budget includes ongoing purchase of replacement portable digital capable radios.

Public Utilities - Electric

Division: Electric Category: 1 Number: 6001.95

Title: Relocation of Utility Lines - DOT

Project Description:

This project involves the relocation of electric lines for North Carolina Department of Transportation (NC DOT) road improvement projects at their cost.

PROJECT	PRIOR YEAR COST	2006-07 BUDGET	2007-08 PLAN	2008-09 PLAN	2009-10 PLAN	2010-11 PLAN	2007-11 PLAN TOTAL
Planning							\$0
Construction							\$0
Equipment/Furnishing	\$0	\$50,000	\$50,000	\$50,000	\$50,000		\$200,000
TOTAL	\$0	\$50,000	\$50,000	\$50,000	\$50,000	\$0	\$200,000
FUNDING SOURCE							
Current Revenue							\$0
Enterprise Revenue							\$0
Debt Proceeds							\$0
Capital Reserves							\$0
Grants/Other	\$0	\$50,000	\$50,000	\$50,000	\$50,000		\$200,000
TOTAL	\$0	\$50,000	\$50,000	\$50,000	\$50,000	\$0	\$200,000

Estimated Annual Opera \$ - Recurring \$ -

Justification:

Project is required to comply with NC DOT.

Project Status:

As requested by NCDOT.

Public Utilities - Electric

Division: Electric Category: 8 Number: 6010.95

Title: Load Management Generation Program

Project Description:

To provide funds for the installation of generators for the purpose of peak shaving for large commercial and industrial customers. This decreases the cost of power to both the city and the customer. Cost of power is one of the factors large customers use when deciding where to locate new facilities. Lower power costs allow the city to be competitive in attracting new industry to the city.

	PRIOR YEAR	2006-07	2007-08	2008-09	2009-10	2010-11	2007-11
PROJECT	COST	BUDGET	PLAN	PLAN	PLAN	PLAN	PLAN TOTAL
Planning							\$0
Construction							\$0
Equipment/Furnishing	\$350,000						\$0
TOTAL	\$350,000	\$0	\$0	\$0	\$0	\$0	\$0
FUNDING SOURCE							
Current Revenue							\$0
Enterprise Revenue	\$100,000						\$0
Debt							\$0
Capital Reserves							\$0
Grants/Other	\$250,000						\$0
TOTAL	\$350,000	\$0	\$0	\$0	\$0	\$0	\$0

Estimated Annual Opera Start up \$ - Recurring \$ 26,000.00

Justification:

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective B - 2, 3, & 4, and F - 1 in that it provides for the installation of generators resulting in lower power costs which support economic development consistent with the Comprehensive Plan.

Project Status:

Generators have been installed at many of our existing large industrial companies. Funds used in FY06 to relocate city-owned generators from American Fibers to the Cheesecake factory location. The City will receive a grant from Golden LEAF Foundation to assist with the cost of the relocation.

Public Utilities - Electric

Division: Electric Category: 5

Number: 6005.95

Title: Distribution System Improvements - Electric

Project Description:

This project provides for improvements to distribution circuits by extending feeders, replacing inadequate systems, and replacing decayed poles. This provides increased service reliability to our customers. Funds are included for the next two fiscal years for the following project:

Express feeder to reservoir area.

Primary distribution loop - Ford's Colony Development.

PROJECT	PRIOR YEAR COST	2006-07 BUDGET	2007-08 PLAN	2008-09 PLAN	2009-10 PLAN	2010-11 PLAN	2007-11 PLAN TOTAL
Planning	\$150,000						\$0
Construction							\$0
Equipment/Furnishing	\$340,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$1,250,000
TOTAL	\$490,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$1,250,000
FUNDING SOURCE							
Current Revenue							\$0
Enterprise Revenue	\$150,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$1,250,000
Debt	\$340,000						\$0
Capital Reserves							\$0
Grants/Other							\$0
TOTAL	\$490,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$1,250,000

Estimated Annual Opera Start up \$ - Recurring \$ -

Justification:

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective B - 1, 2, & 3, and F - 1 in that it provides for the expansion and maintenance of the electric distribution system which supports economic development and is consistent with the Comprehensive Plan.

Project Status:

Design specifications for reservoir feeder to be completed FY06 and will begin construction , purchase polls and supplies.
Purchase land for 2nd point of delivery site \$150,000

Public Utilities - Electric

Division: Electric Category: 8

Number: 6003.95

Title: Load Management Program

Project Description:

These funds will be used to purchase new equipment for our load management program and peak shaving systems. The load management program assists to lower the coincidental peak, which substantially lowers our cost of electricity.

PROJECT	PRIOR YEAR COST	2006-07 BUDGET	2007-08 PLAN	2008-09 PLAN	2009-10 PLAN	2010-11 PLAN	2007-11 PLAN TOTAL
Planning							\$0
Construction							\$0
Equipment/Furnishing	\$50,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000
TOTAL	\$50,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000
FUNDING SOURCE							
Current Revenue							\$0
Enterprise Revenue	\$50,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000
Debt							\$0
Capital Reserves							\$0
Grants/Other							\$0
TOTAL	\$50,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000

Estimated Annual Opera Start up \$ - Recurring \$ -

Justification:

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective B - 3 & 4, and F - 1 in that it provides for the purchase of equipment which lowers the city's cost of power which is consistent with the Comprehensive Plan.

Project Status:

To date, the city has installed 6,309 water heater switches, 4,824 air conditioner switches, 1,496 total control switches, and 478 heat strip switches. Cost per switch is ~ \$100.

Public Utilities - Electric

Division: Electric Category: 10 Number: 6013.96

Title: Street Light Improvement

Project Description:

This project involves installing street lighting according to North Carolina Department of Transportation (NC DOT) standards. The next project is to provide street lighting along US 301 North from Jefferies Road to the entrance to Hospira (Abbott's) Industrial Plant. This is a two year project.

PROJECT	PRIOR YEAR COST	2006-07 BUDGET	2007-08 PLAN	2008-09 PLAN	2009-10 PLAN	2010-11 PLAN	2007-11 PLAN TOTAL
Planning/Acquisition							\$0
Construction							\$0
Equipment/Furnishing	\$0	\$75,000	\$100,000	\$100,000	\$100,000	\$100,000	\$475,000
TOTAL	\$0	\$75,000	\$100,000	\$100,000	\$100,000	\$100,000	\$475,000

FUNDING SOURCE							
Current Revenue							\$0
Enterprise Revenue	\$0	\$75,000	\$100,000	\$100,000	\$100,000	\$100,000	\$475,000
Debt							\$0
Capital Reserves							\$0
Grants/Other							\$0
TOTAL	\$0	\$75,000	\$100,000	\$100,000	\$100,000	\$100,000	\$475,000

Estimated Annual Opera Start up \$ - Recurring \$ 25,000

Justification:

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective F - 2 in that it provides for installing street lighting which is consistent with the Comprehensive Plan.

Project Status:

Project is planned for FY06-07.

Public Utilities - Electric

Division: Electric Category: 9

Number: 6014.97

Title: Utility GIS & Dispatching System

Project Description:

This project involves the creation and maintenance of a Graphical Information System (GIS) database of the City's electric and gas facilities. This data is used by the electric and gas system models, long range planning studies, electronic and paper system maps, work order system and the automated trouble call system. These systems will enable the Utility Department to efficiently plan and design system expansions and reinforcements, improve outage response times, support 24 hour dispatching, and accurately bill for all pole attachments such as cable TV, street lights and rental lights.

PROJECT	PRIOR YEAR COST	2006-07 BUDGET	2007-08 PLAN	2008-09 PLAN	2009-10 PLAN	2010-11 PLAN	2007-11 PLAN TOTAL
Planning/Acquisition							\$0
Construction							\$0
Equipment/Furnishing	\$200,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000
TOTAL	\$200,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000
FUNDING SOURCE							
Current Revenue							\$0
Enterprise Revenue	\$200,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000
Debt							\$0
Capital Reserves							\$0
Grants/Other							\$0
TOTAL	\$200,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000

Estimated Annual Opera Start up \$ - Recurring \$ -

Justification:

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective B - 1, 2, & 3, & F - 1 in that it provides for the expansion and maintenance of the electric distribution system which supports economic development and is consistent with the Comprehensive Plan.

Project Status:

Work completed - Upgrade SCADA system hardware and software. Made SCADA available to additional users over City network. Replaced Interactive Voice Response (IVR) hardware and software.

Work Pending - Survey of pole attachments (transformers, street lights, cable tv, etc.), mapping of underground electric distribution system. Dissemination of electronic maps (through the use of a lap top/pen based computer) of all underground electric and gas facilities for the two Utility Locators.

Public Utilities - Electric

Division: Electric Category: 5

Number:

Title: Upgrade Point of Delivery Station

Project Description:

Project is to upgrade the city's single Electrical Point of Delivery Station where all electrical power is received. This equipment is at the end of its usable life and failure will result in a city-wide power interruption. Funds are to replace the existing relays, 69 kV circuit breakers and switches as well as to split this one supply point into two thereby further reducing city-wide power interruption exposure. Funds are also included to acquire land for the construction of a future additional point of delivery station. Load growth projections indicate this additional station will be needed in the next 11 to 20 years. There are limited locations where land is available that has both Progress Energy and city transmission lines adjacent. This land should be purchased now while it is still available.

PROJECT	PRIOR YEAR COST	2006-07 BUDGET	2007-08 PLAN	2008-09 PLAN	2009-10 PLAN	2010-11 PLAN	2007-11 PLAN TOTAL
Planning/Acquisition							\$0
Construction	\$1,177,400						\$0
Equipment/Furnishing							\$0
TOTAL	\$1,177,400	\$0	\$0	\$0	\$0	\$0	\$0
FUNDING SOURCE							
Current Revenue							\$0
Enterprise Revenue							\$0
Debt	\$1,177,400						\$0
Capital Reserves							\$0
Grants/Other							\$0
TOTAL	\$1,177,400	\$0	\$0	\$0	\$0	\$0	\$0

Estimated Annual Opera Start up \$ - Recurring \$ -

Justification:

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective B - 1, & 2, and F - 1 in that it provides for the maintenance and upgrading of the electric distribution system and provides for proper management of the electric distribution system which also supports economic development all of which are consistent with the Comprehensive Plan.

Project Status:

Design of project is completed. Replacement 69 kV circuit breakers have been received. Construction contract has been awarded and should be completed by end of FY 05-06.

Public Utilities - Electric

Division: Electric Category: 5

Number:

Title: Upgrade Substation #1

Project Description:

This project is to replace the 45+ year old 69kV substation transformer at Substation # 1. Station transformers have a life span of ~40 years. This transformer is well past that and is at the end of its useful and reliable life. This was identified for replacement in the long range planning study and should be replaced to insure system reliability, reduce system losses, and provide a satisfactory level of customer service.

PROJECT	PRIOR YEAR COST	2006-07 BUDGET	2007-08 PLAN	2008-09 PLAN	2009-10 PLAN	2010-11 PLAN	2007-11 PLAN TOTAL
Planning						\$100,000	\$100,000
Construction						\$1,000,000	\$1,000,000
Equipment/Furnishing							\$0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$1,100,000	\$1,100,000
FUNDING SOURCE							
Current Revenue							\$0
Enterprise Revenue							\$0
Debt						\$1,100,000	\$1,100,000
Capital Reserves							\$0
Grants/Other							\$0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$1,100,000	\$1,100,000

Estimated Annual Opera Start up \$ - Recurring \$ -

Justification:

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective B - 1, & 2, and F - 1 in that it provides for the maintenance and upgrading of the electric distribution system and provides for proper management of the electric distribution system which also supports economic development all of which are consistent with the Comprehensive Plan.

Project Status:

Public Utilities - Electric

Division: Electric Category: 5

Number:

Title: Upgrade Substation # 2

Project Description:

This project is to rebuild the low side bus structure and associated circuit breakers and relays at Substation # 2. This equipment is at the end of its useful life and has become unreliable. The dielectric components of each are breaking down and subject to failure. Repair parts are no longer readily available. These items were identified for replacement in the long range planning study and must be replaced to insure system reliability, reduce system losses, and provide a satisfactory level of customer service.

PROJECT	PRIOR YEAR COST	2006-07 BUDGET	2007-08 PLAN	2008-09 PLAN	2009-10 PLAN	2010-11 PLAN	2007-11 PLAN TOTAL
Planning		\$300,000					\$300,000
Construction		\$1,000,000					\$1,000,000
Equipment/Furnishing							\$0
TOTAL	\$0	\$1,300,000	\$0	\$0	\$0	\$0	\$1,300,000

FUNDING SOURCE

Current Revenue							\$0
Enterprise Revenue							\$0
Debt		\$1,300,000					\$1,300,000
Capital Reserves							\$0
Grants/Other							\$0
TOTAL	\$0	\$1,300,000	\$0	\$0	\$0	\$0	\$1,300,000

Estimated Annual Opera Start up \$ - Recurring \$ -

Justification:

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective B - 1, & 2, and F - 1 in that it provides for the maintenance and upgrading of the electric distribution system and provides for proper management of the electric distribution system which also supports economic development all of which are consistent with the Comprehensive Plan.

Project Status:

Project will be designed and constructed in FY 06-07.

Public Utilities - Electric

Division: Electric Category: 5

Number:

Title: Upgrade Substation # 5

Project Description:

This project is to rebuild the low side bus structure and associated circuit breakers and relays at Substation # 5. This equipment is at the end of its useful life and has become unreliable. The dielectric components of each are breaking down and subject to failure. Repair parts are no longer readily available. These items were identified for replacement in the long range planning study and must be replaced to insure system reliability, reduce system losses, and provide a satisfactory level of customer service.

PROJECT	PRIOR YEAR COST	2006-07 BUDGET	2007-08 PLAN	2008-09 PLAN	2009-10 PLAN	2010-11 PLAN	2007-11 PLAN TOTAL
Planning					\$350,000		\$350,000
Construction					\$1,150,000		\$1,150,000
Equipment/Furnishing							\$0
TOTAL	\$0	\$0	\$0	\$0	\$1,500,000	\$0	\$1,500,000
FUNDING SOURCE							
Current Revenue							\$0
Enterprise Revenue							\$0
Debt					\$1,500,000		\$1,500,000
Capital Reserves							\$0
Grants/Other							\$0
TOTAL	\$0	\$0	\$0	\$0	\$1,500,000	\$0	\$1,500,000

Estimated Annual Opera Start up \$ - Recurring \$ -

Justification:

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective B - 1, & 2, and F - 1 in that it provides for the maintenance and upgrading of the electric distribution system and provides for proper management of the electric distribution system which also supports economic development all of which are consistent with the Comprehensive Plan.

Project Status:

05-06: The transformers at sub # 4 and #5 are identical units. The load tap changer from the unused transformer at #4 was installed on the transformer at #5. This solved the reliability problem with the transformer at #5.

09-10: Replacement of the low side bus structure and associated circuit breakers and relays will be designed and constructed.

Public Utilities - Electric

Division: Electric Category: 5

Number:

Title: Upgrade Substation # 11

Project Description:

The transformers at substations #6, 10 and 11 are heavily loaded during peak summer load. With continued system load growth, if one were to fail there may not be sufficient capacity in the other transformers to pick up the load. This project will provide funds to test and relocate the unused transformer from substation #4 to 11. It also provides funding to construct the necessary low side bus structure and associated circuit breakers and relays at substation #11. This project is necessary in order to continue providing a satisfactory level of customer service.

PROJECT	PRIOR YEAR COST	2006-07 BUDGET	2007-08 PLAN	2008-09 PLAN	2009-10 PLAN	2010-11 PLAN	2007-11 PLAN TOTAL
Planning							\$0
Construction	\$400,000						\$0
Equipment/Furnishing							\$0
TOTAL	\$400,000	\$0	\$0	\$0	\$0	\$0	\$0
FUNDING SOURCE							
Current Revenue							\$0
Enterprise Revenue							\$0
Debt	\$400,000						\$0
Capital Reserves							\$0
Grants/Other							\$0
TOTAL	\$400,000	\$0	\$0	\$0	\$0	\$0	\$0

Estimated Annual Opera Start up \$ - Recurring \$ -

Justification:

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective B - 1, & 2, and F - 1 in that it provides for the maintenance and upgrading of the electric distribution system and provides for proper management of the electric distribution system which also supports economic development all of which are consistent with the Comprehensive Plan.

Project Status:

06-07: System load growth will be re-evaluated to confirm need and projected date of construction.

Public Utilities - Electric

Division: Electric Category: 5

Number: 6006.95

Title: New Transmission Lines

Project Description:

Project is to install a 4 mile, 69kv transmission line to the Reservoir Water Treatment Plant property. Due to system load growth in this area, the construction of a new substation is tentatively planned for this site in FY 10-11. This transmission line initially will be operated at distribution voltage in order to supply the needed support to this area. When the new substation is constructed the line will be upgraded to transmission voltage. These items were identified in the long range planning study and must be completed to provide adequate power to the customers in this area of the city's electrical distribution system.

PROJECT	PRIOR YEAR COST	2006-07 BUDGET	2007-08 PLAN	2008-09 PLAN	2009-10 PLAN	2010-11 PLAN	2007-11 PLAN TOTAL
Planning						\$200,000	\$200,000
Construction							\$0
Equipment/Furnishing							\$0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$200,000	\$200,000
FUNDING SOURCE							
Current Revenue							\$0
Enterprise Revenue						\$200,000	\$200,000
Debt							\$0
Capital Reserves							\$0
Grants/Other							\$0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$200,000	\$200,000

Estimated Annual Opera Start up \$ - Recurring \$ -

Justification:

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective B - 1, & 2, and F - 1 in that it provides for the maintenance and upgrading of the electric distribution system and provides for proper management of the electric distribution system which also supports economic development all of which are consistent with the Comprehensive Plan.

Project Status:

06-07: System load growth will be re-evaluated to confirm need and projected date of construction of new substation and transmission line.

10-11: Project will be planned and acquisition of Right of Way will commence.

11-12: Acquisition of Right of Way will continue.

12-13: Project will be constructed.

Public Utilities - Electric

Division: Electric Category: 6

Number:

Title: Transmission Line Clearance

Project Description:

This project is to provide for right-of-way acquisition and tree trimming and removal along the transmission line to Substation # 14. This Substation supplies power to Whitakers Industrial Park where some of the city's largest industrial customers are located. It is the only substation with a single 69kv feed. Tree growth on private property along the route of this line is jeopardizing the city's ability to supply reliable uninterrupted power. This item was identified in the long range planning study and must be completed to provide reliable uninterrupted power which is critical to the operation of these industrial customers.

PROJECT	PRIOR YEAR COST	2006-07 BUDGET	2007-08 PLAN	2008-09 PLAN	2009-10 PLAN	2010-11 PLAN	2007-11 PLAN TOTAL
Planning							\$0
Construction			\$110,000				\$110,000
Equipment/Furnishing							\$0
TOTAL	\$0	\$0	\$110,000	\$0	\$0	\$0	\$110,000
FUNDING SOURCE							
Current Revenue							\$0
Enterprise Revenue			\$110,000				\$110,000
Debt							\$0
Capital Reserves							\$0
Grants/Other							\$0
TOTAL	\$0	\$0	\$110,000	\$0	\$0	\$0	\$110,000

Estimated Annual Opera Start up \$ - Recurring \$ -

Justification:

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective B - 1, & 2, and F - 1 in that it provides for the maintenance and upgrading of the electric distribution system and provides for proper management of the electric distribution system which also supports economic development all of which are consistent with the Comprehensive Plan.

Project Status:

Project is planned for FY 07-08.

Public Utilities - Electric

Division: Electric Category: 8 Number: 6022.99

Title: Central Dispatch Center

Project Description:

This project provides funds for the expansion and renovation of the Electric and Gas Operations building to provide for 24-hour Central Dispatch and Storm Operations Center. The Public Utilities Department has outgrown its present facilities. Current after hours dispatching is performed by Police Dispatch. All four utility operations (Electric, Gas, Water, Sewer) will be dispatched from this Central Dispatch Center 24 hours a day as well as any other non-public safety related calls. Will also provide funds for the electronic equipment to both dispatch all four utilities and to manage utility response during emergency conditions such as storms.

PROJECT	PRIOR YEAR COST	2006-07 BUDGET	2007-08 PLAN	2008-09 PLAN	2009-10 PLAN	2010-11 PLAN	2007-11 PLAN TOTAL
Planning/Acquisition	\$0						\$0
Construction			\$400,000				\$400,000
Equipment/Furnishing			\$300,000				\$300,000
TOTAL	\$0	\$0	\$700,000	\$0	\$0	\$0	\$700,000
FUNDING SOURCE							
Current Revenue							\$0
Enterprise Revenue							\$0
Debt			\$700,000				\$700,000
Capital Reserves							\$0
Grants/Other							\$0
TOTAL	\$0	\$0	\$700,000	\$0	\$0	\$0	\$700,000

Estimated Annual Opera Start up \$ - Recurring \$ 168,000

Justification:

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective B - 2 and F - 1 in that it through strategic planning and proper management of the electric distribution system it provides for quality utility service which is consistent with the Comprehensive Plan.

Project Status:

Project is currently on hold pending study of the City's current and future uses and activities at the Operation Complex on Albemarle Ave.

Public Utilities - Electric

Division: Electric Category: 5

Number:

Title: Transmission Pole Replacement

Project Description:

This project is to provide for the replacement of wooden transmission line poles and insulators. These poles support the city's 69kv transmission system which supplies power to the city's 14 substations. They are critical to the operation of the electrical system. 159 of these poles are 33+ years old. 621 of these poles have a manufacture date that is no longer readable. These poles are at the end of their usable life and will be replaced with steel poles. This item was identified in the long range planning study and is necessary to continue to provide reliable electrical service to our customers.

PROJECT	PRIOR YEAR COST	2006-07 BUDGET	2007-08 PLAN	2008-09 PLAN	2009-10 PLAN	2010-11 PLAN	2007-11 PLAN TOTAL
Planning							\$0
Construction	\$50,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$1,250,000
Equipment/Furnishing							\$0
TOTAL	\$50,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$1,250,000
FUNDING SOURCE							
Current Revenue							\$0
Enterprise Revenue	\$50,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$1,250,000
Debt							\$0
Capital Reserves							\$0
Grants/Other							\$0
TOTAL	\$50,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$1,250,000

Estimated Annual Opera Start up \$ - Recurring \$ -

Justification:

Project is consistent with the Community Facilities Section of the Comprehensive Plan, Objective B - 1, & 2, and F - 1 in that it provides for the maintenance and upgrading of the electric distribution system and provides for proper management of the electric distribution system which also supports economic development all of which are consistent with the Comprehensive Plan.

Project Status:

04-05: 14 poles replaced.

05-06: 17 poles replaced.

Public Utilities - Electric

Division: Electric Category: 6

Number:

Title: Sectionalizing Plan - Electric

Project Description:

Project is to provide for a protection device coordination study and purchase of additional sectionalizing devices. A protection device coordination study will insure proper size protection devices (relays, reclosers, and fuses) are installed and will coordinate to localize power interruptions while insuring the proper level of protection is provided to all equipment. Additional sectionalizing devices protect equipment and localize power interruptions and are necessary as system grows in both load and size. This study was last performed in 1988. There have been many changes to the distribution system since then which necessitate this study. These items were identified in the long range planning study and are necessary to continue to provide safe, reliable electrical service to our customers.

PROJECT	PRIOR YEAR COST	2006-07 BUDGET	2007-08 PLAN	2008-09 PLAN	2009-10 PLAN	2010-11 PLAN	2007-11 PLAN TOTAL
Planning		\$40,000					\$40,000
Construction		\$60,000					\$60,000
Equipment/Furnishing							\$0
TOTAL	\$0	\$100,000	\$0	\$0	\$0	\$0	\$100,000
FUNDING SOURCE							
Current Revenue							\$0
Enterprise Revenue		\$100,000					\$100,000
Debt							\$0
Capital Reserves							\$0
Grants/Other							\$0
TOTAL	\$0	\$100,000	\$0	\$0	\$0	\$0	\$100,000

Estimated Annual Opera Start up \$ - Recurring \$ -

Justification:

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective B - 1, & 2, and F - 1 in that it provides for the maintenance and upgrading of the electric distribution system and provides for proper management of the electric distribution system which also supports economic development all of which are consistent with the Comprehensive Plan.

Project Status:

Study is \$40,000; Implementation is \$60,000.

Public Utilities - Electric

Division: Electric Category: 6

Number: 6024.02

Title: Long Range Plan - Electric

Project Description:

This project provides funding for a long range planning study of the City's electric system and the creation of a distribution system model. The distribution system model will be utilized for system analysis including present system voltage and capacity as well as long-range voltage and capacity at 2, 5 and 10 year intervals. The long range plan will include system load growth projections based on historical usage information, weather and mathematical trending, and an analysis of factors influencing electricity use in each geographical area. This study will be the basis for all future system improvements such as rebuilding, constructing, and locating substations, reinforcement circuit installations, and minimizing system losses.

PROJECT	PRIOR YEAR COST	2006-07 BUDGET	2007-08 PLAN	2008-09 PLAN	2009-10 PLAN	2010-11 PLAN	2007-11 PLAN TOTAL
Planning/Acquisition				\$50,000			\$50,000
Construction							\$0
Equipment/Furnishing							\$0
TOTAL	\$0	\$0	\$0	\$50,000	\$0	\$0	\$50,000
FUNDING SOURCE							
Current Revenue							\$0
Enterprise Revenue				\$50,000			\$50,000
Debt							\$0
Capital Reserves							\$0
Grants/Other							\$0
TOTAL	\$0	\$0	\$0	\$50,000	\$0	\$0	\$50,000

Estimated Annual Opera Start up \$ - Recurring \$ -

Justification:

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective B - 1, & 2, and F - 1 in that it provides for the maintenance and upgrading of the electric distribution system and provides for proper management of the electric distribution system which also supports economic development all of which are consistent with the Comprehensive Plan.

Project Status:

Current long range plan has been developed. The CIP budget has been prepared based on this plan. An update to the plan is scheduled for FY 08-09.

Public Utilities - Electric

Division: Electric Category: 2, 8

Number:

Title: Automated Meter Reading -Electric

Project Description:

To provide funding for Automated Meter Reading (AMR) of electric, gas and water meters. AMR provides meter reading without gaining access to a customers property. Costs are reduced through reduced staffing, reduced re-reads, more accurate reads, and elimination of access problems. Customer service is improved by eliminating estimated bills, reducing high bill complaints, and eliminating need to access customer premise. Cash flow is improved by fewer meter reading cycles and reduced revenue delays due to inaccurate or estimated reads. It also reduces liabilities through greatly reduced employee driving of vehicles, and entering customer premises. Theft detection is also greatly enhanced.

PROJECT	PRIOR YEAR COST	2006-07 BUDGET	2007-08 PLAN	2008-09 PLAN	2009-10 PLAN	2010-11 PLAN	2007-11 PLAN TOTAL
Planning/Acquisition							\$0
Construction							\$0
Equipment/Furnishing	\$348,000	\$200,000	\$200,000	\$1,600,000			\$2,000,000
TOTAL	\$348,000	\$200,000	\$200,000	\$1,600,000	\$0	\$0	\$2,000,000
FUNDING SOURCE							
Current Revenue							\$0
Enterprise Revenue	\$348,000	\$200,000	\$200,000				\$400,000
Debt				\$1,600,000			\$1,600,000
Capital Reserves							\$0
Grants/Other							\$0
TOTAL	\$348,000	\$200,000	\$200,000	\$1,600,000	\$0	\$0	\$2,000,000

Estimated Annual Operation \$ - Recurring \$ -

Justification:

Project is consistent with the Community Facilities Element of the Comprehensive Plan; Strategy B - 2 & F - 1 in that it upgrades existing utility service and improves the management of utilities which is consistent with the Comprehensive Plan.

Project Status:

05-06:

- 600 electric meters with an AMR device were installed in the pilot project.
- ~3,000 electric meters with an AMR device will be installed in various locations.

06-07:

- ~3,000 electric meters with an AMR device will be installed in various locations.

Public Utilities - Electric

Division: Electric Category: 9 Number: 6025.02

Title: Equipment Shed - Electric

Project Description:

To fund the construction of an equipment shed at the pole yard. This building would be 200' by 40'. It would be used to store approximately 20 pieces of the Utility Department's construction equipment (bucket trucks, line trucks, trenchers, backhoes, mini derrick). This equipment is deteriorating since it is now stored outside in the weather. In addition, various emergency supplies would be centrally stored here such as substation equipment, transformer oil, copper wire, etc. allowing for faster response to outages.

PROJECT	PRIOR YEAR COST	2006-07 BUDGET	2007-08 PLAN	2008-09 PLAN	2009-10 PLAN	2010-11 PLAN	2007-11 PLAN TOTAL
Planning/Acquisition							\$0
Construction	\$100,000						\$100,000
Equipment/Furnishing							\$0
TOTAL	\$100,000	\$0	\$0	\$0	\$0	\$0	\$100,000
FUNDING SOURCE							
Current Revenue							\$0
Enterprise Revenue	\$100,000						\$100,000
Debt							\$0
Capital Reserves							\$0
Grants/Other							\$0
TOTAL	\$100,000	\$0	\$0	\$0	\$0	\$0	\$100,000
Estimated Annual Opera Start up \$ - Recurring \$ -							

Justification:

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective B - 1, 2, & 3, and F - 1 in that it provides for proper storage of the equipment necessary to maintain and expand the city's electric distribution system which is consistent with the Comprehensive Plan.

Project Status:

Project is planned for FY 06-07.

Public Utilities - Electric

Division: Electric Category: 9

Number: 6025.02

Title: Transformer Shop Addition

Project Description:

To fund the construction of an additional work bay on the transformer shop located at the pole yard. This addition will house a workshop area to be utilized by the substation technicians.

PROJECT	PRIOR YEAR COST	2006-07 BUDGET	2007-08 PLAN	2008-09 PLAN	2009-10 PLAN	2010-11 PLAN	2007-11 PLAN TOTAL
Planning/Acquisition							\$0
Construction		\$60,000					\$60,000
Equipment/Furnishing							\$0
TOTAL	\$0	\$60,000	\$0	\$0	\$0	\$0	\$60,000
FUNDING SOURCE							
Current Revenue							\$0
Enterprise Revenue		\$60,000					\$60,000
Debt							\$0
Capital Reserves							\$0
Grants/Other							\$0
TOTAL	\$0	\$60,000	\$0	\$0	\$0	\$0	\$60,000

Estimated Annual Operation Start up \$ - Recurring \$ -

Justification:

Project is consistent with the Community Facilities Section of the Comprehensive Plan; Objective B - 1, 2, & 3, and F - 1 in that it provides workshop area for proper repair of substation equipment which is consistent with the Comprehensive Plan.

Project Status:

Project is planned for FY 06-07.



Public Utilities - Gas

FUNDING SOURCES:	PRIOR YEAR COST	2006-07 BUDGET	2007-08 PLAN	2008-09 PLAN	2009-10 PLAN	2010-11 PLAN	2007-11 PLAN TOTAL
Grant	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Capital Reserves	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Debt	\$0	\$185,000	\$100,000	\$3,000,000	\$0	\$0	\$3,285,000
General Fund Contribution	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Gas Fund Contribution	\$1,251,800	\$1,010,000	\$1,000,000	\$990,000	\$850,000	\$990,000	\$4,840,000
TOTAL FUNDING	\$1,251,800	\$1,195,000	\$1,100,000	\$3,990,000	\$850,000	\$990,000	\$8,125,000

PROJECT DESCRIPTIONS:

Equipment Replacement - Gas	\$215,000	\$185,000	\$150,000	\$190,000	\$50,000	\$100,000	\$675,000
New Mains - Gas	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$1,500,000
Replace Cast Iron Gas Main	\$450,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$1,250,000
New Services -Gas	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$750,000
Gas System Expansion	\$0	\$150,000	\$100,000	\$100,000	\$100,000	\$100,000	\$550,000
Automated Meter Reading - Gas	\$136,800	\$100,000	\$100,000	\$1,500,000	\$0	\$0	\$1,700,000
Gas Meter Prover	\$0	\$60,000	\$0	\$0	\$0	\$0	\$60,000
Replacement Gas Main - DOT	\$0	\$0	\$0	\$0	\$0	\$90,000	\$90,000
Peak Shaving Facility	\$0	\$0	\$50,000	\$1,500,000	\$0	\$0	\$1,550,000
TOTAL PROJECTS	\$1,251,800	\$1,195,000	\$1,100,000	\$3,990,000	\$850,000	\$990,000	\$8,125,000

Public Utilities - Gas

Division: Gas

Category: 5

Number:

6502.95

Title: Equipment Replacement - Gas

Project Description:

This project will provide funds for new and replacement construction equipment necessary for the installation and maintenance of natural gas mains and services. Proper and reliable equipment is essential for ensuring safe and cost effective operation of the Gas Division. Equipment that is not replaced at the end its usable life increases repair costs and operating costs, while decreasing safety, reliability, and customer satisfaction.

This budget provides for replacing equipment on the following cycle:

2 - Backhoe - 5 years

2 - Trencher, Mains - 4 years

2 - Trencher, Services - 4 years

EQUIPMENT	N/R	PRIOR YEAR COST	2006-07 BUDGET	2007-08 PLAN	2008-09 PLAN	2009-10 PLAN	2010-11 PLAN	2007-11 PLAN TOTAL
Trencher - Mains	R		\$95,000		\$100,000			\$195,000
Trencher - Services	R	\$45,000		\$50,000		\$50,000		\$100,000
Backhoe	R	\$90,000			\$90,000		\$100,000	\$190,000
Crew Truck	R	\$80,000	\$90,000					\$90,000
Small Boring Rig	N			\$100,000				\$100,000
TOTAL		\$215,000	\$185,000	\$150,000	\$190,000	\$50,000	\$100,000	\$675,000

FUNDING SOURCE

Current Revenue								\$0
Enterprise Revenue		\$215,000		\$50,000	\$190,000	\$50,000	\$100,000	\$390,000
Debt			\$185,000	\$100,000				\$285,000
Capital Reserves								\$0
Grants/Other								\$0
TOTAL		\$215,000	\$185,000	\$150,000	\$190,000	\$50,000	\$100,000	\$675,000

N/R= New or Replacement

Public Utilities - Gas

Division: Gas Category: 8 Number: 6500.95

Title: New Mains - Gas

Project Description:

This project provides funds for the installation of natural gas mains to serve new residential, commercial and industrial customers. Our citizens benefit by being provided the choice of an economical energy source. The city benefits through increased revenues due to increased natural gas sales and customer satisfaction. Large projects anticipated for FY 06-07 are:

Ford's Colony - 1,000 homes

Oak Level Crossing - 100 homes.

Hwy 97 - 100 homes.

PROJECT	PRIOR YEAR COST	2006-07 BUDGET	2007-08 PLAN	2008-09 PLAN	2009-10 PLAN	2010-11 PLAN	2007-11 PLAN TOTAL
Planning							\$0
Construction	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$1,500,000
Equipment/Furnishing							\$0
TOTAL	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$1,500,000
FUNDING SOURCE							
Current Revenue							\$0
Enterprise Revenue	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$1,500,000
Bond Proceeds							\$0
Capital Reserves							\$0
Grants/Other							\$0
TOTAL	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$1,500,000

Estimated Annual Opera \$ - Recurring \$ -

Justification:

This project is consistent with the Community Facilities Element of the Comprehensive Plan; Strategy F-1 in that it provides for gas main extensions consistent with the Comprehensive Plan.

Project Status:

Year to date footage 67,302 feet with a projection of 75,000 ft. Projects include Autumn Ridge Subd. phases 1 & 3; Weathervane Subd. Phase 3; Flagmarsh Subd. Phase 3; Fords Colony Subd. Phases 2 & 3; Mayfair Drive Subd. Phases 2 & 3; Shamrock Subd.; Carriage Farms Phase 5; Carriage Pond Phase 4; Cross Creek Subd.

Public Utilities - Gas

Division: Gas

Category: 2

Number:

6505.98

Title: Replace Cast Iron Gas Main

Project Description:

This project provides for the replacement of all cast iron gas main. Approximately 123,303' of cast iron main remains in service, mainly in the downtown area. This gas main is 50 to 100 years old, subject to breakage and leakage, and is very difficult to stabilize and repair. Over the past few years, more leaks have occurred in the cast iron pipe network than throughout the rest of the system. This is part of an eight-year plan of replacement. The city's voluntary replacement of cast iron main has precluded a mandatory replacement by the North Carolina Utilities Commission.

PROJECT	PRIOR YEAR COST	2006-07 BUDGET	2007-08 PLAN	2008-09 PLAN	2009-10 PLAN	2010-11 PLAN	2007-11 PLAN TOTAL
Planning/Acquisition							\$0
Construction							\$0
Equipment/Furnishing	\$450,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$1,250,000
TOTAL	\$450,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$1,250,000
FUNDING SOURCE							
Current Revenue							\$0
Enterprise Revenue	\$450,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$1,250,000
Debt							\$0
Capital Reserves							\$0
Grants/Other							\$0
TOTAL	\$450,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$1,250,000

Estimated Annual Opera \$ - Recurring \$ -

Justification:

This project is consistent with the Community Facilities Element of the Comprehensive Plan; Strategy B-2 in that it provides upgrading existing gas facilities consistent with the Comprehensive Plan.

Project Status:

Year to date cast iron main replacement included upgrades in Edgecombe County on the following streets: Branch Street, Pender Street, Clark Street, Edgecombe Street, Buena Vista Avenue, Redgate Avenue, Dunn Street, Ambler Avenue, Arlington Street, Washington Street, Bassett Street, Jordan Street and Hendricks Street. All streets were upgraded with a high-pressure plastic main and an ytd total of 210 homes have been converted over with an estimated 175 homes remaining for this year. Total footage of cast iron abandoned is 16,275 feet that was replaced with 32,000 feet of plastic main serving both sides of the roadway.

06-07 projected projects to complete Edgecombe County low pressure system with the replacement of around 15,000 feet of main and another 500 homes. Will also start the replacement of low pressure mains in Nash County.

Public Utilities - Gas

Division: Gas Category: 8 Number: 6507.98

Title: New Services -Gas

Project Description:

This project provides funds for the installation of natural gas services lines from new and existing mains for new residential, commercial, and industrial customers.

PROJECT	PRIOR YEAR COST	2006-07 BUDGET	2007-08 PLAN	2008-09 PLAN	2009-10 PLAN	2010-11 PLAN	2007-11 PLAN TOTAL
Planning/Acquisition							\$0
Construction	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$750,000
Equipment/Furnishing							\$0
TOTAL	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$750,000
FUNDING SOURCE							
Current Revenue							\$0
Enterprise Revenue	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$750,000
Debt							\$0
Capital Reserves							\$0
Grants/Other							\$0
TOTAL	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$750,000

Estimated Annual Opera \$ - Recurring \$ -

Justification:

This project is consistent with the Community Facilities Element of the Comprehensive Plan; Strategies F-1 in that it provides for the installation of gas services consistent with the Comprehensive Plan.

Project Status:

Year to date footage 19,700 feet with a projection of 50,000 ft. Projects include the installation of 197 ytd requested services in the Rocky Mount, Nashville and Hwy 97 areas and the projection of another 300 services.

Public Utilities - Gas

Division: Gas

Category: 8

Number:

Title: Gas System Expansion

Project Description:

This project provides funding for the expansion of the natural gas distribution system into areas of planned development.

A 13,000' extension of 6" plastic on Womble Road from Cedar Street to Beulah Road including a bore under Route 64 is planned for 06-07. This will extend natural gas to the growing residential area north of Nashville.

PROJECT	PRIOR YEAR COST	2006-07 BUDGET	2007-08 PLAN	2008-09 PLAN	2009-10 PLAN	2010-11 PLAN	2007-11 PLAN TOTAL
Planning/Acquisition							\$0
Construction		\$150,000	\$100,000	\$100,000	\$100,000	\$100,000	\$550,000
Equipment/Furnishing							\$0
TOTAL	\$0	\$150,000	\$100,000	\$100,000	\$100,000	\$100,000	\$550,000
FUNDING SOURCE							
Current Revenue							\$0
Enterprise Revenue		\$150,000	\$100,000	\$100,000	\$100,000	\$100,000	\$550,000
Debt							\$0
Capital Reserves							\$0
Grants/Other							\$0
TOTAL	\$0	\$150,000	\$100,000	\$100,000	\$100,000	\$100,000	\$550,000

Estimated Annual Opera \$ - Recurring \$ -

Justification:

This project is consistent with the Community Facilities Element of the Comprehensive Plan; Strategy F-1 in that it provides for gas main extensions consistent with the Comprehensive Plan.

Project Status:

This is to fund a 6-inch main expansion of the North side of Nashville. The project will extend the existing 6-inch main 13,000 feet on Alston St. north to Womble Rd. to Beulah Rd. There are currently 2 subdivisions under construction with an estimated 500 homes and future plans of a 3rd subdivision to begin construction fall of 06 with an estimated 700 homes. This is to meet the request of the developers to supply natural gas to the homes.

Public Utilities - Gas

Division: Gas

Category: 2, 8

Number:

Title: Automated Meter Reading - Gas

Project Description:

To provide funding for Automated Meter Reading (AMR) of electric, gas and water meters. AMR provides meter reading without gaining access to a customers property. Costs are reduced through reduced staffing, reduced re-reads, more accurate reads, and elimination of access problems. Customer service is improved by eliminating estimated bills, reducing high bill complaints, and eliminating need to access customer premise. Cash flow is improved by fewer meter reading cycles and reduced revenue delays due to inaccurate or estimated reads. It also reduces liabilities through greatly reduced employee driving of vehicles, and entering customer premises. Theft detection is also greatly enhanced.

PROJECT	PRIOR YEAR COST	2006-07 BUDGET	2007-08 PLAN	2008-09 PLAN	2009-10 PLAN	2010-11 PLAN	2007-11 PLAN TOTAL
Planning/Acquisition							\$0
Construction							\$0
Equipment/Furnishing	\$136,800	\$100,000	\$100,000	\$1,500,000			\$1,700,000
TOTAL	\$136,800	\$100,000	\$100,000	\$1,500,000	\$0	\$0	\$1,700,000
FUNDING SOURCE							
Current Revenue							\$0
Enterprise Revenue	\$136,800	\$100,000	\$100,000				\$200,000
Debt				\$1,500,000			\$1,500,000
Capital Reserves							\$0
Grants/Other							\$0
TOTAL	\$136,800	\$100,000	\$100,000	\$1,500,000	\$0	\$0	\$1,700,000

Estimated Annual Opera \$ - Recurring \$ -

Justification:

This project is consistent with the Community Facilities Element of the Comprehensive Plan; Strategy B - 2 & F - 1 in that it upgrades existing utility service and improves the management of utilities which is consistent with the Comprehensive Plan.

Project Status:

600 homes converted on pilot project in areas of Town of Nashville, Englewood and Meadowbrook Park areas.

Public Utilities - Gas

Division: Gas Category: 8

Number:

Title: Gas Meter Prover

Project Description:

This project provides funding for the purchase of an Automated Gas Meter Prover and a Portable Large Volume Gas Meter Prover. Gas Meter Provers are used to test and calibrate gas meters. The two gas provers that the Gas Division currently has are stationary provers originally purchased in the 1940's. Automated provers are able to test and prove gas meters 10 to 15 times faster than the existing provers and interface with a computer for automated record keeping. Current record keeping is not automated. A portable prover allows the testing of large volume gas meters in the field. The vendor who currently provides this service has stated his intention to retire in the near future. A portable prover will allow the City to make these tests and not rely on a vendor.

PROJECT	PRIOR YEAR COST	2006-07 BUDGET	2007-08 PLAN	2008-09 PLAN	2009-10 PLAN	2010-11 PLAN	2007-11 PLAN TOTAL
Planning/Acquisition							\$0
Construction		\$60,000					\$60,000
Equipment/Furnishing							\$0
TOTAL	\$0	\$60,000	\$0	\$0	\$0	\$0	\$60,000
FUNDING SOURCE							
Current Revenue							\$0
Enterprise Revenue		\$60,000					\$60,000
Debt							\$0
Capital Reserves							\$0
Grants/Other							\$0
TOTAL	\$0	\$60,000	\$0	\$0	\$0	\$0	\$60,000

Estimated Annual Opera \$ - Recurring \$ -

Justification:

This project is consistent with the Community Facilities Element of the Comprehensive Plan; Strategy F - 1 in that it improves the management of the Gas Division which is consistent with the Comprehensive Plan.

Project Status:

Equipment will be purchased and installed in FY 06-07.

Public Utilities - Gas

Division: Gas

Category: 1

Number:

Title: Replacement Gas Main - DOT

Project Description:

This project involves the replacement of a 6" steel natural gas main on the Sunset Avenue bridge over Wesleyan Blvd due to North Carolina Department of Transportation's (NC DOT) planned rebuilding of the bridge.

PROJECT	PRIOR YEAR COST	2006-07 BUDGET	2007-08 PLAN	2008-09 PLAN	2009-10 PLAN	2010-11 PLAN	2007-11 PLAN TOTAL
Planning/Acquisition							\$0
Construction						\$90,000	\$90,000
Equipment/Furnishing							\$0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$90,000	\$90,000
FUNDING SOURCE							
Current Revenue							\$0
Enterprise Revenue						\$90,000	\$90,000
Debt							\$0
Capital Reserves							\$0
Grants/Other							\$0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$90,000	\$90,000

Estimated Annual Opera \$ - Recurring \$ -

Justification:

Project is required to comply with NC DOT.

Project Status:

NC DOT has indicated they intend to replace this bridge in the near future since it is in poor condition and has the lowest clearance of any bridge along Wesleyan Blvd.

Public Utilities - Gas

Division: Gas

Category: 8

Number:

Title: Peak Shaving Facility

Project Description:

This project provides funding for planning and construction of a natural gas peak shaving storage facility. Construction of a peak shaving facility will provide a local storage facility for natural gas. This volume of gas can be utilized on the coldest or "peak" days thereby offsetting the need to increase the contract demand.

PROJECT	PRIOR YEAR COST	2006-07 BUDGET	2007-08 PLAN	2008-09 PLAN	2009-10 PLAN	2010-11 PLAN	2007-11 PLAN TOTAL
Planning/Acquisition			\$50,000				\$50,000
Construction				\$1,500,000			\$1,500,000
Equipment/Furnishing							\$0
TOTAL	\$0	\$0	\$50,000	\$1,500,000	\$0	\$0	\$1,550,000
FUNDING SOURCE							
Current Revenue							\$0
Enterprise Revenue			\$50,000				\$50,000
Debt				\$1,500,000			\$1,500,000
Capital Reserves							\$0
Grants/Other							\$0
TOTAL	\$0	\$0	\$50,000	\$1,500,000	\$0	\$0	\$1,550,000

Estimated Annual Opera \$ - 6,800 Recurring \$ -

Justification:

This project is consistent with the Community Facilities Element of the Comprehensive Plan; Strategy F - 1 in that it improves the management of the natural gas supply which is consistent with the Comprehensive Plan.

Project Status:

Engineering studies are planned for FY 06-07 which will determine peak shaving storage facility volume and throughput requirements; suitable location for the facility based on system take away capabilities and available land; development of a site specific design.

Construction is planned for 07-08.